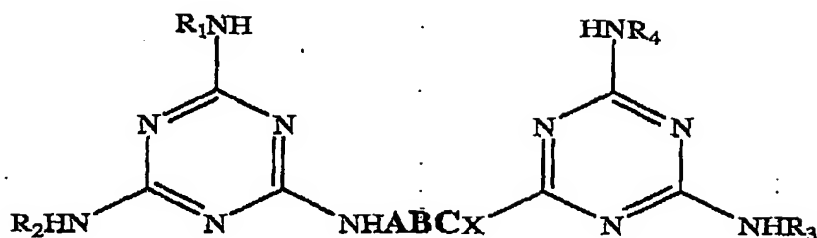
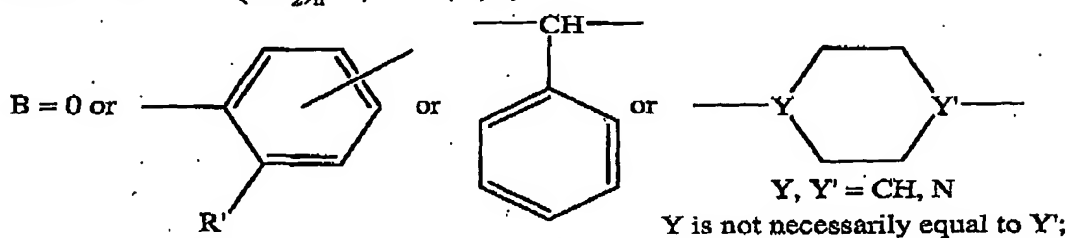


## WHAT IS CLAIMED IS:

1. A compound of the following formula:



where  $A = -(CH_2)_n-$ ,  $n = 0, 1, 2$ ;



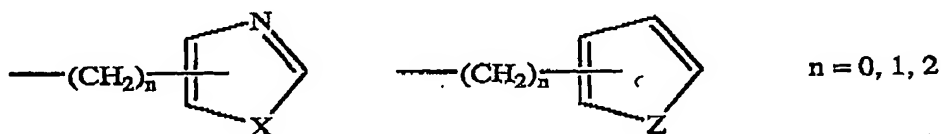
$C = -(CH_2)_n-$ ,  $n = 0, 1, 2$ ; or 

$X = NH, O, S$ ;

$R' = \text{hydrogen or } C_{1-4} \text{ alkyl; and}$

$A$  is not necessarily equal to  $C$ ;

wherein  $R_1, R_2, R_3$  and  $R_4$  are independently selected from the group consisting of hydrogen,  $C_{2-4}$  alkyl or alkenyl,  $C_{2-4}$  hydroxyalkyl,  $C_{2-4}$  aminoalkyl, trifluoromethyl, pentafluoroethyl, phenyl, naphthyl, benzyl, biphenyl, phenethyl, piperazinyl, N-methylpiperazinyl, N-ethylpiperazinyl, morpholinyl, piperidinyl, methylpiperidinyl, ethylpiperidinyl, indenyl, 2,3-dihydroindenyl,  $C_4$ - $C_7$  cycloalkyl or cycloalkenyl, indoyl, methylindoyl, ethylindoyl, and substituted five-membered aromatic heterocyclic rings of the following formulas:



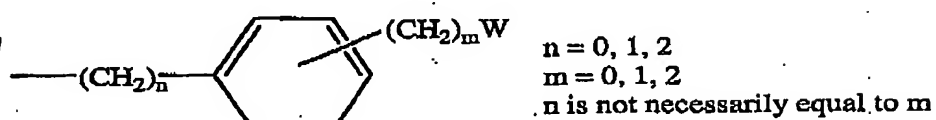
X is defined as above and Z = NH, CH<sub>2</sub>;

or substituted phenyl rings of the following formulas:



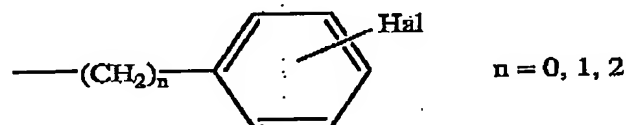
X and R' are defined as above;

or



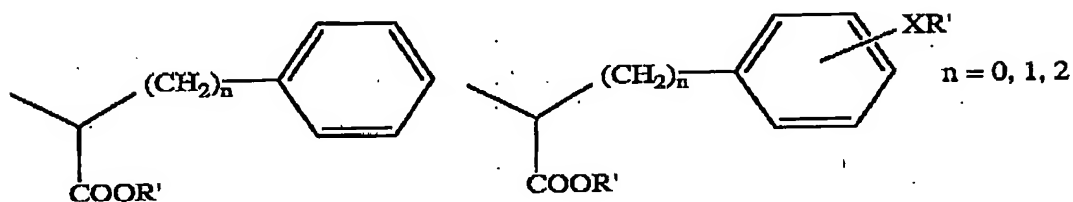
W = hydrogen, CH<sub>3</sub>, NH<sub>2</sub>, COOR', OR';

or



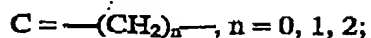
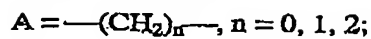
Hal = Halogen;

or

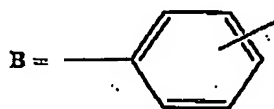


X and R' are defined as above.

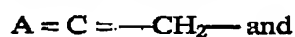
2. The compound according to claim 1, wherein:



A is not necessarily equal to C; and



3. The compound according to claim 1, wherein:



4. The compound according to claim 2 or 3, wherein:

$R_1$  and  $R_4$  are selected from the group consisting of hydroxyethyl, hydroxypropyl, hydroxybutyl, amino, aminoethyl, aminopropyl, aminobutyl, phenyl, anilino, hydroxyphenyl, and aminophenethyl;

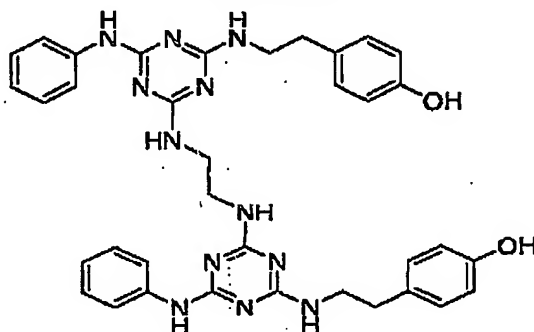
$R_2$  and  $R_3$  are selected from the group consisting of anilino, aminoanilino, phenethyl, hydroxyphenethyl.

5. A compound selected from the group consisting of:

Compound No.

Structure

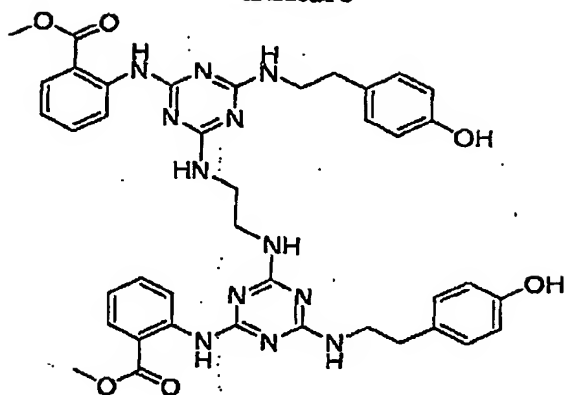
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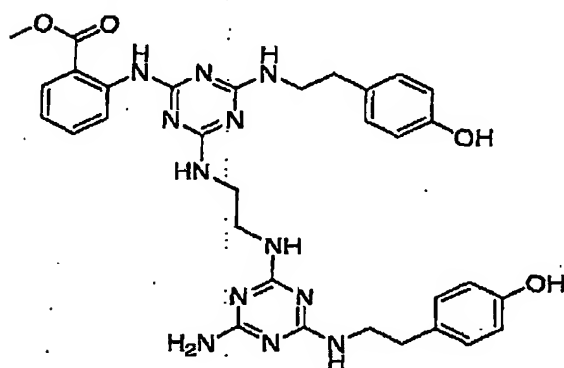
## Compound No.

## Structure

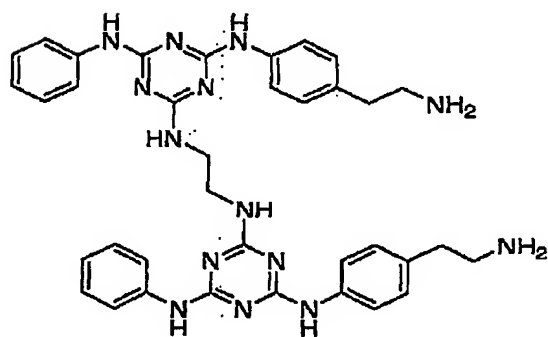
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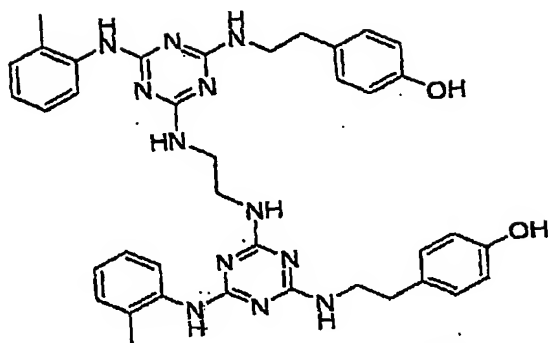
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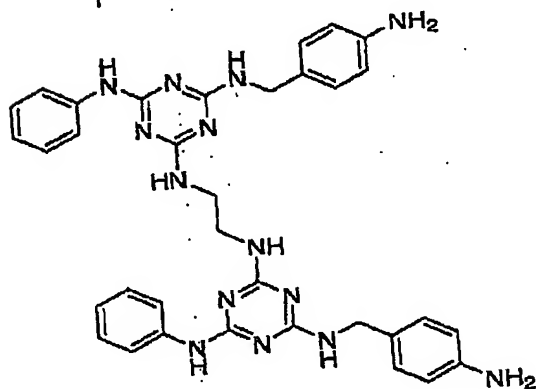
Compound No.

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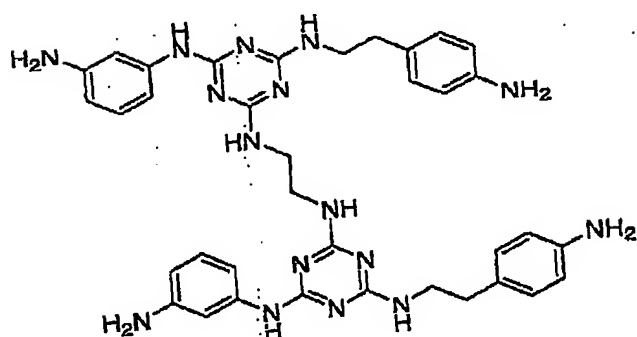
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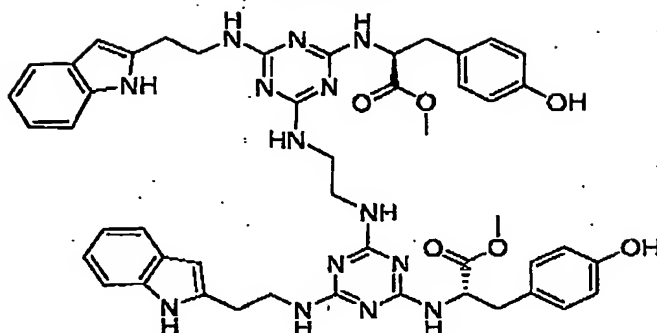
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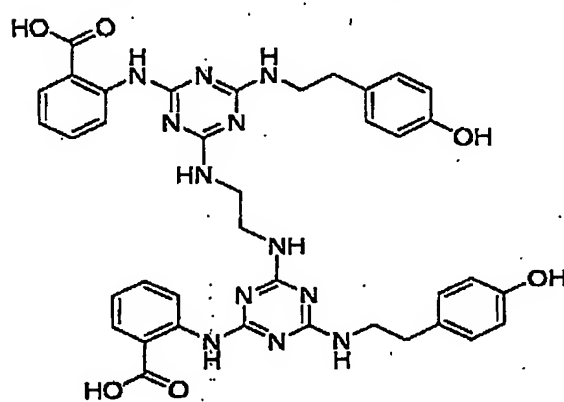
## Compound No.

## Structure

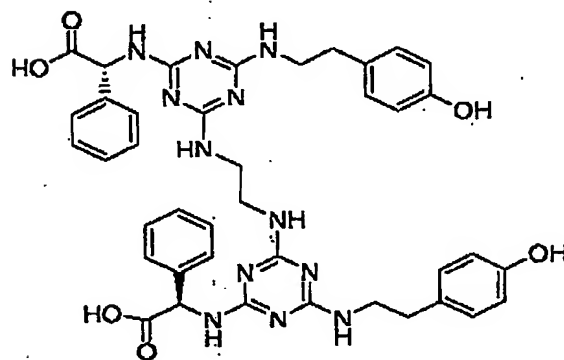
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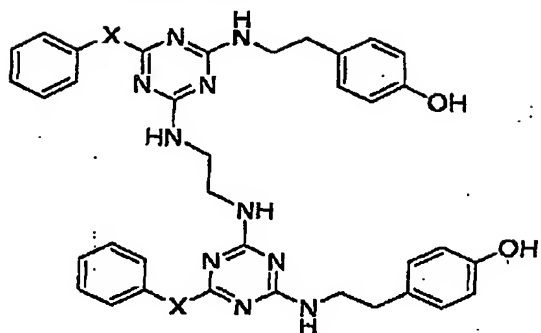


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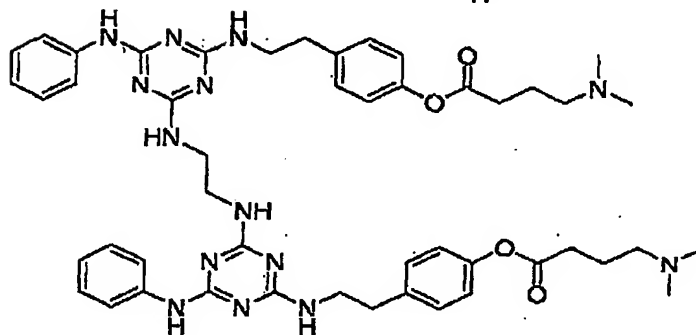


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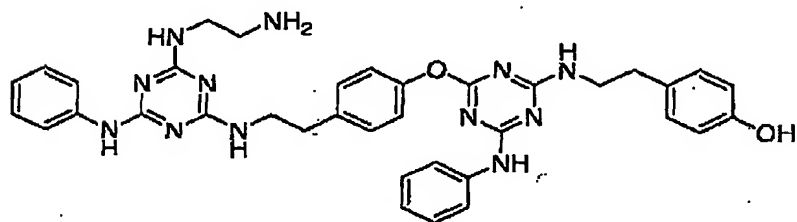
## Structure

11a  
11bX = O  
X = S

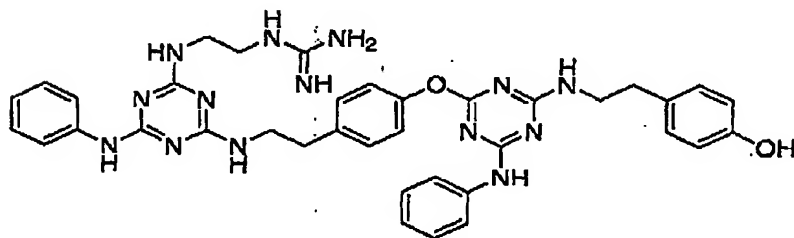
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13



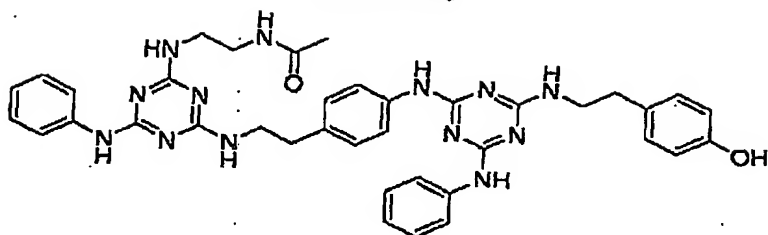
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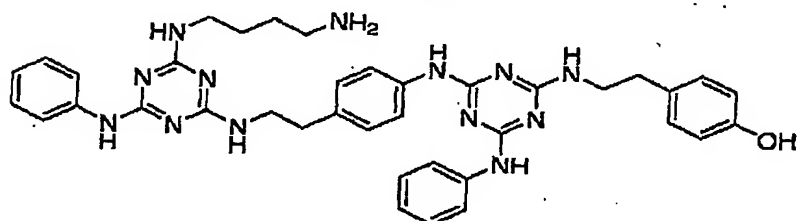
Compound No.

Structure

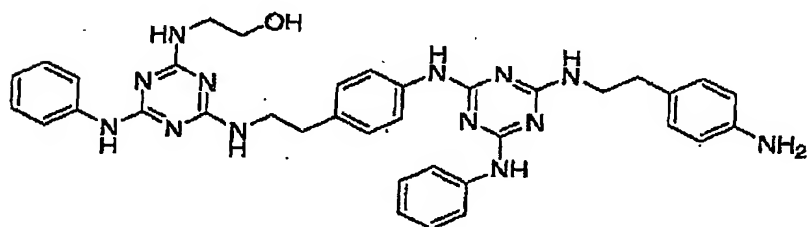
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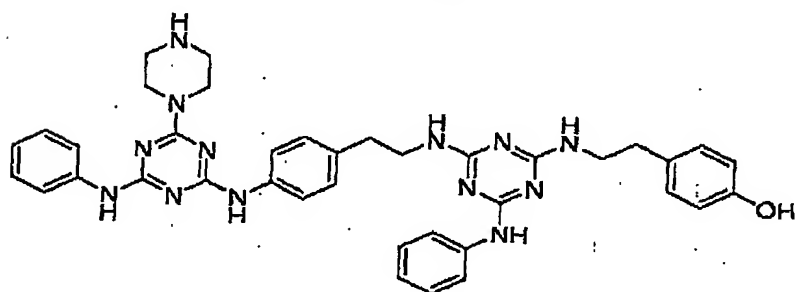
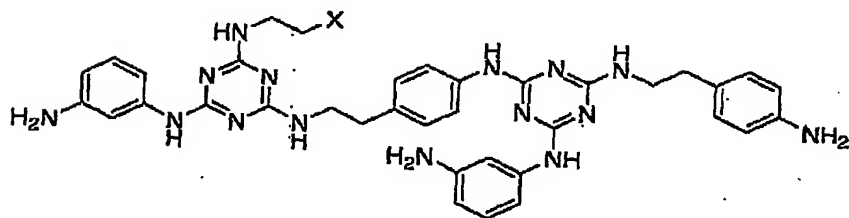
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17



18

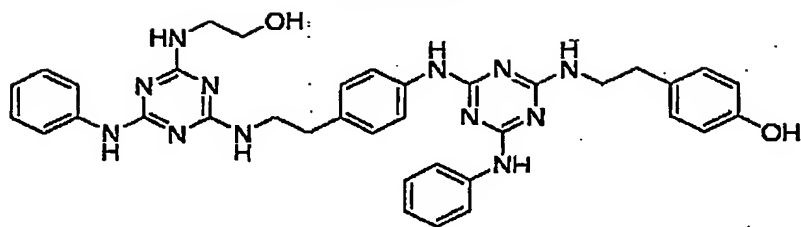
19a  
X = OH19b  
X = NH<sub>2</sub>



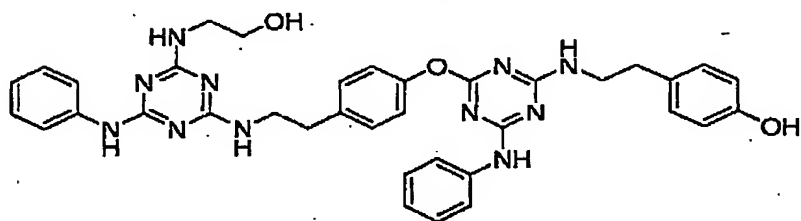
## Compound No.

## Structure

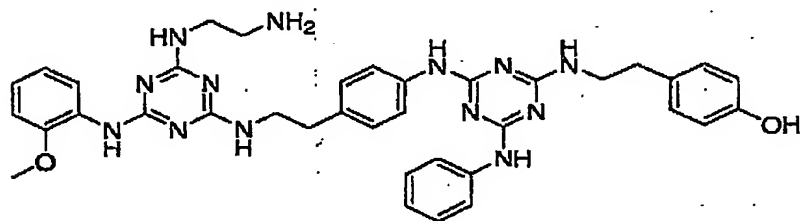
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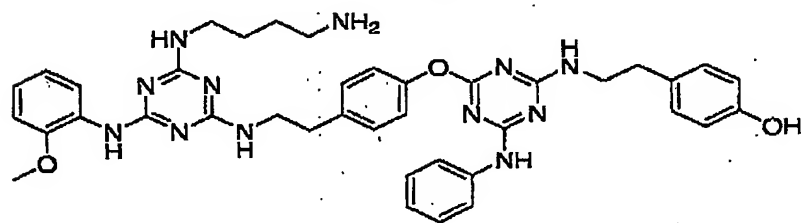
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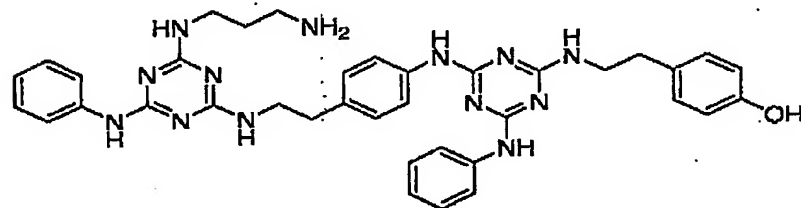
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23



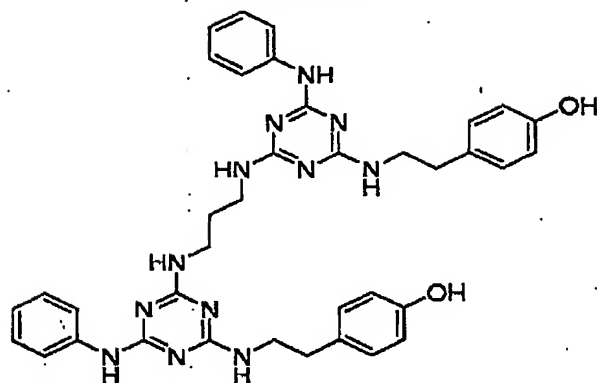
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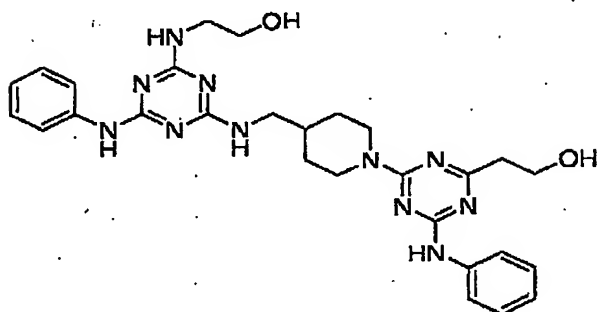
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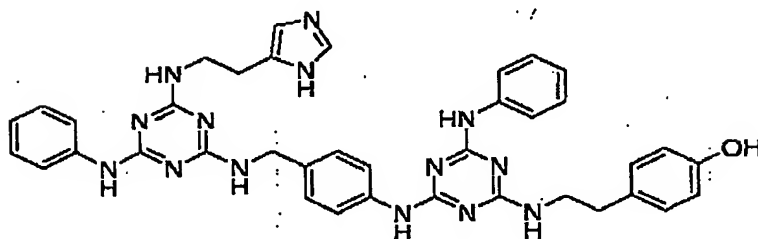
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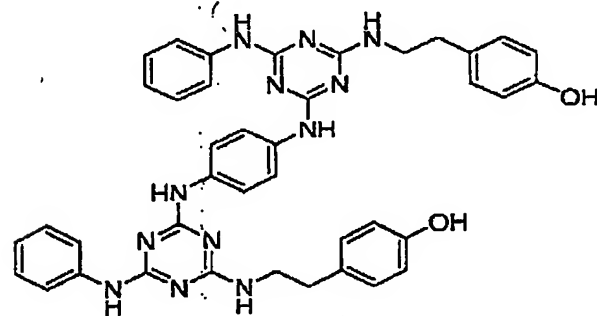
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27



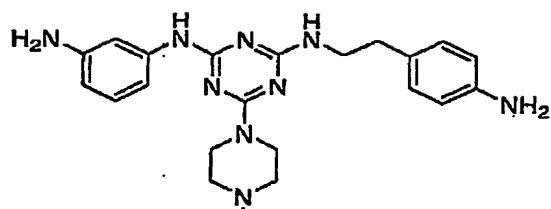
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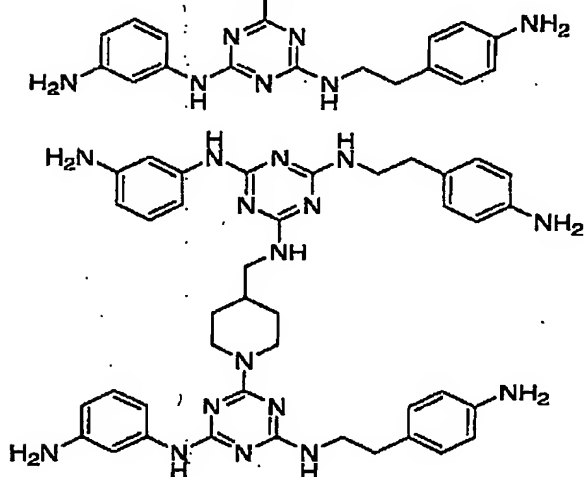
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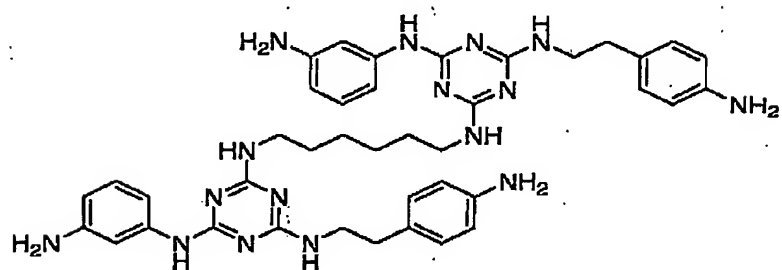
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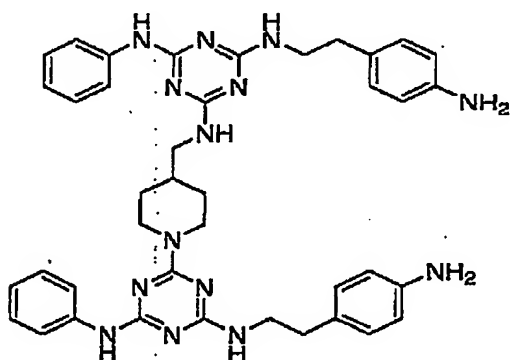
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31



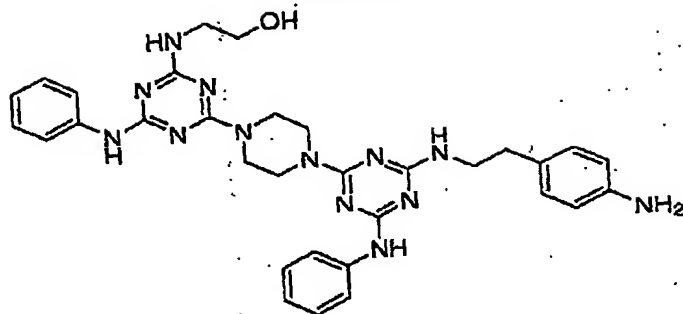
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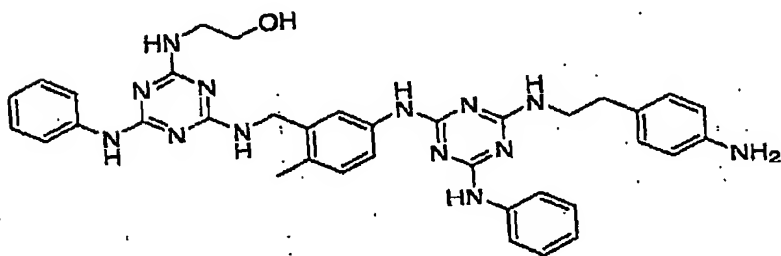
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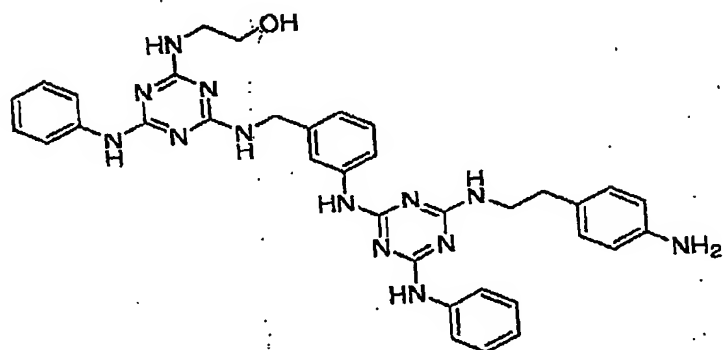
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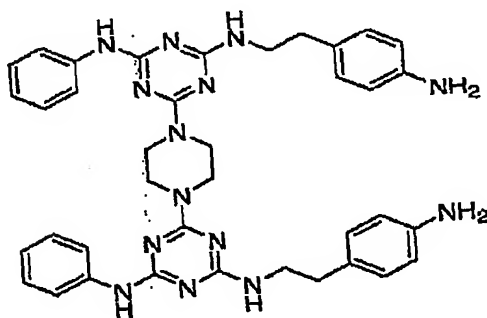
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35



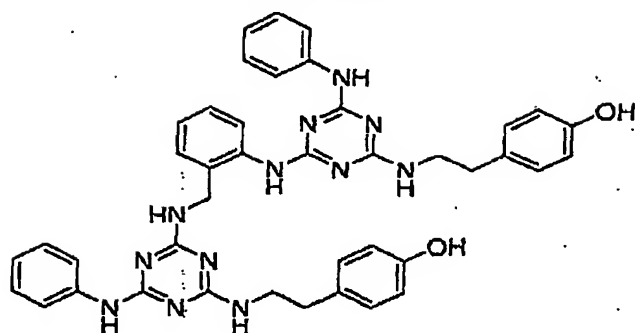
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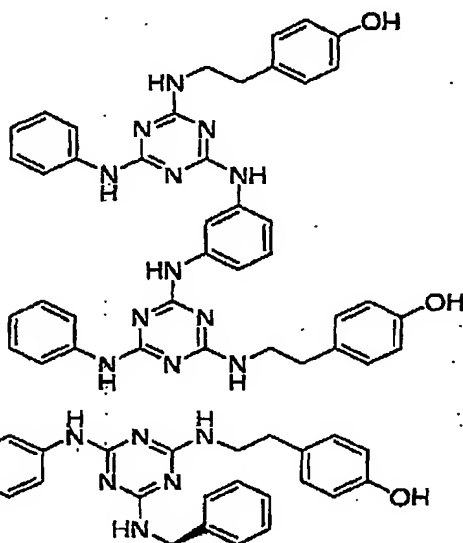
## Compound No.

## Structure

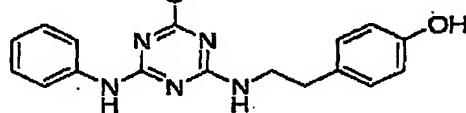
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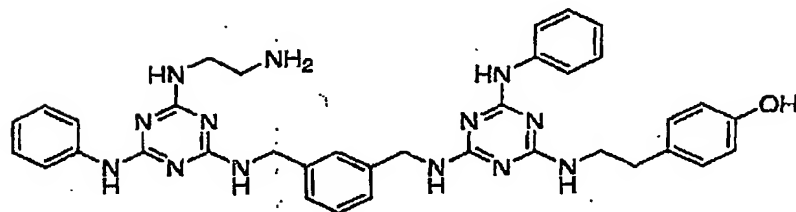
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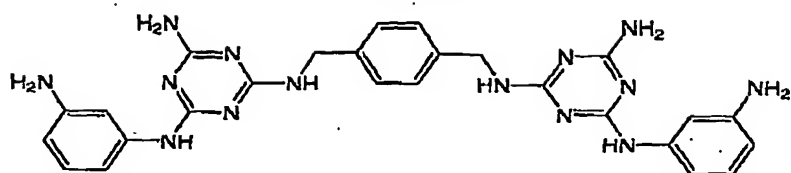
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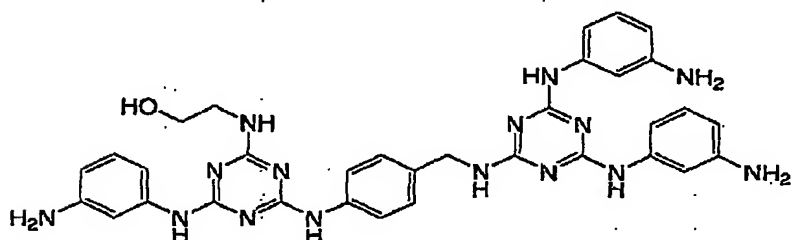
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## Structure

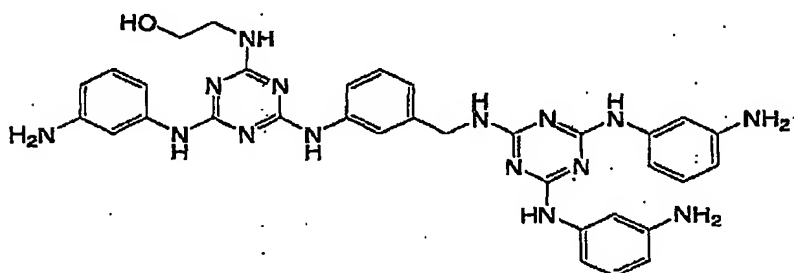
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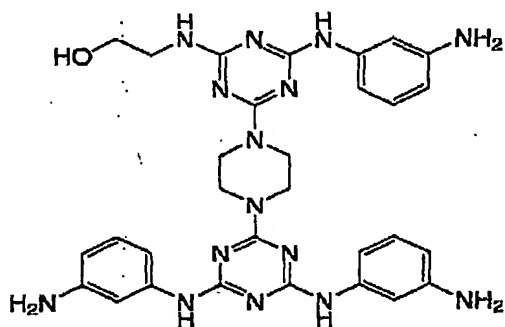
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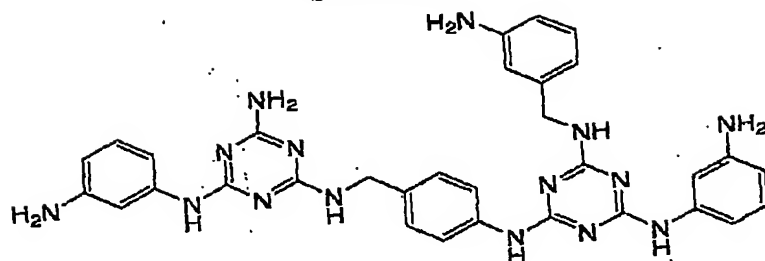
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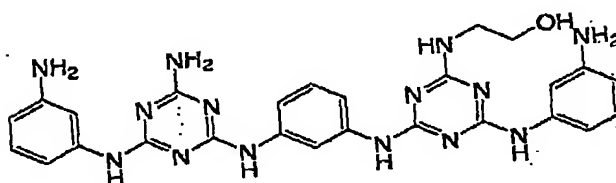
Compound No.

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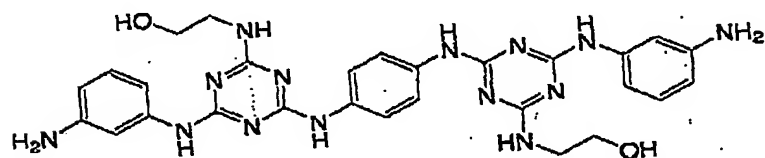
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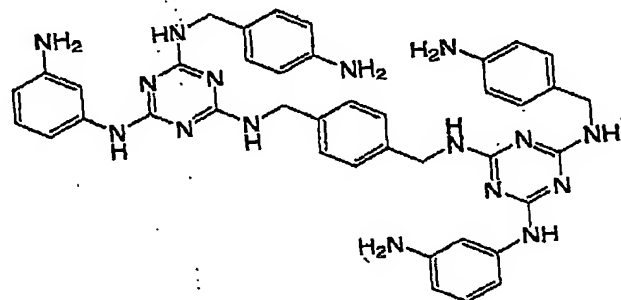
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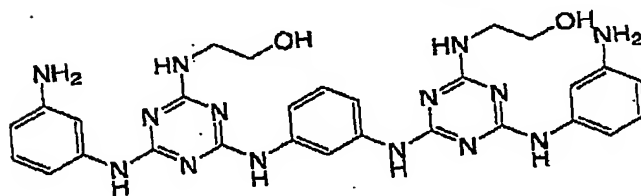
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48



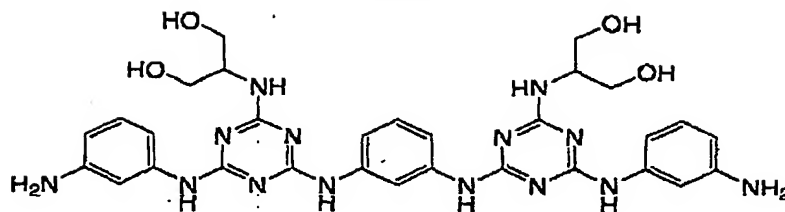
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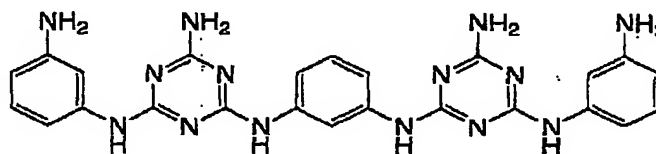
## Compound No.

## Structure

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6. The compound according to any one of claims 1 to 5, which can noncovalently bind to antibodies.

7. The compound according to any one of claims 1 to 4 which can noncovalently bind to antibodies wherein one, two, three or all of the substituents  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$  is



8. The compound according to claim 6 or 7 wherein the antibodies are at least of the human IgG isotype.

9. A composition comprised of at least one compound according to any one of claims 1 to 8, wherein said compound is combined with a pharmaceutically acceptable carrier.

10. The composition according to claim 9, wherein said carrier solubilizes said compound in an alcohol or polyol solvent.



11. The composition according to claim 9 further comprised of a recombinant protein which is able to bind to human TNF $\alpha$ .
12. The composition according to claim 11, wherein said recombinant protein is anti-TNF $\alpha$  antibody or soluble TNF $\alpha$  receptor.
13. The composition according to claim 9 further comprised of methotrexate.
14. The composition according to claim 9 further comprised of an anti-inflammatory corticosteroid.
15. The composition according to claim 9 further comprised of a nonsteroidal anti-inflammatory drug.
16. A method of treating a patient with an autoimmune disease, comprising administration to said patient of a therapeutically effective amount of a compound according to any one of claims 1 to 8 or a composition according to any one of claims 9 to 12.
17. The method of claim 16, wherein said autoimmune disease is selected from the group consisting of systemic lupus erythematosus, immune thrombocytopenia, glomerulonephritis, vasculitis and arthritis.
18. The method of claim 16, wherein said autoimmune disease is selected from the group consisting of rheumatoid arthritis, psoriatic arthritis, psoriasis, Crohn's disease, inflammatory bowel disease, ankylosing spondylitis, Sjögren's syndrome, Still's disease (macrophage activation syndrome), uveitis, scleroderma, myositis, Reiter's syndrome and Wegener's syndrome.
19. The method of claim 16 further comprising simultaneous administration of a therapeutically effective amount of a recombinant protein which is able to bind to

human TNF $\alpha$ , wherein said therapeutically effective amount of recombinant protein is reduced in the presence of said compound.

20. The method of claim 16 further comprising separate administration of a therapeutically effective amount of a recombinant protein which is able to bind to human TNF $\alpha$  before and/or after administration of said compound, but not simultaneous administration.

21. Use of one or more compounds according to any one of claims 1 to 8 to affect inflammation in a mammal.

22. A method of removal of human antibodies comprised of circulating blood or other physiological fluid through an apheresis column, wherein one or more compounds according to any one of claims 1 to 8 are covalently linked either directly or with an organic linker to an insoluble support material which constitutes part of said apheresis column such that at least some free antibodies and/or antibody-antigen immune complexes are bound thereto; and returning at least some said blood or other physiological fluid, wherein at least some human antibodies have been removed therefrom, to a patient from whom said blood or other physiological fluid was obtained.

23. A method of purification of antibodies comprised of binding antibodies with one or more compounds according to any one of claims 1 to 8 covalently linked either directly or with an organic linker to an insoluble support material such that at least some antibodies are noncovalently bound to said compounds linked to the insoluble support and purifying said antibodies.

24. Use of one or more compounds according to any one of claims 1 to 8 to bind an antibody.